

was generated using SuperScript RNase H reverse transcriptase (Gibco/BRL) and a primer complimentary to a sequence in the 3'-untranslated region of the human GRP78/BiP mRNA transcript (AB10230; 5'-TATTACAGCACTAGCAGATCAGTG-3') (SEQ ID NO:1). For PCR amplification, the forward primer AB10231 (5'-
CTTAAGCTTGCACCATGAAGCTCTCCCTGGTGGCCGCG-3') (SEQ ID NO:2) contained a Kozak consensus sequence (bold) prior to the initiating ATG and a terminal *Hind*III restriction site (underlined). The reverse primer AB10232 (5'-
AGGCCTCGAGCTACAACTCATCTTTCTGCTGT-3') (SEQ ID NO:3) contained a terminal *Xho*I restriction site (underlined) adjacent to the authentic termination codon of the GRP78/BiP cDNA. PCR reactions took place in a final volume of 50 µl containing 2 µl of the RT reaction, 100 ng of primers, 2.5 U *Taq* polymerase (Perkin-Elmer, Mississauga, ON) in a buffer consisting of 1.5 mM MgCl₂, 50 mM KCl, 10 mM Tris-HCl (pH 8.8) and 0.5 mM of each dNTP. All samples were subjected to amplification in a DNA thermal cycler 480 (Perkin-Elmer) with a step programme of 30 cycles of 94°C for 1 min, 58°C for 1 min, and 72°C for 1 min. The amplified GRP78/BiP cDNA was separated on a 0.8% agarose-TBE gel containing ethidium bromide, purified from the agarose gel using the QIAEX gel extraction kit (Qiagen, Mississauga, ON) and ligated into T-ended pBluescript (KS) (Stratagene, La Jolla, CA). The ligation mixture was then used to transform competent DH5 α cells (Gibco/BRL). Plasmid DNA was isolated from transformed cells using the QIAEX miniprep kit (Qiagen), digested with *Hind*III and *Xho*I, and the GRP78/BiP cDNA insert purified from agarose. The GRP78/BiP cDNA insert was ligated into the *Hind*III/*Xho*I site of the mammalian expression vector pcDNA3.1(+) (Invitrogen, Carlsbad, CA) to produce the recombinant plasmid, pcDNA3.1(+)-GRP78/BiP. Authenticity of the GRP78/BiP cDNA sequence was confirmed by fluorescence-based double stranded DNA sequencing (MOBIX).

(Note page 46 is missing)
Please replace the paragraph beginning at page 46, line 3, with the following rewritten paragraph:

SEQ ID NO:4

Human GRP78/BiP amino acid sequence

MKLSLVAAMLLLSAARAEEEDKKEDVTVVGIDLGTTYSCGVFKNGRVEIIA
NDQGNRITPSYVAFTPEGERLIGDAAKNQLTSNPENTVFDAKRLIGRTWNNDPSVQ
QDIKFLPKVVEKKTKPYIQVDIGGGQTKTFAPEEISAMVLTKMKETAEAYLGKK

VTHAVVTVPAYFNDAAQRQATKADGTIAGLNVMRIINEPTAAAIAYGLDKREGEK
NILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEFDQRVMEHFIKLYKK
KTGKDVRKDNRAVQKLREVEAKRALSSQHQARIEIESFYEGEDFSETLRAKF
EELNMDLFRSTMKPVQKVLEDSDLKKSIDEIVLVGGSTRIPKIQQLVKEFFNGK
EPSRGINPDEAVAYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKL
IPRNTVVPTKKSQIFSTASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPAPRG
VPQIEVTFEIDVNGILRVTAEDKG TGKGNKNKITITNDQNRLTPEEIERMVNDAEKFA
EEDKKLKERIDTRNELESYAYSLKNQIGDKEKLGGKLSSEDKETMEKAVEEKIE
WLESHQDADIEDFKAKKKELE EIVQPIISKLYGSAGPPPGEEDTAEKDEL

Please replace the paragraph beginning at page 46, line 20, with the following
rewritten paragraph:

SEQ ID NO: 5

Human GRP78/BiP mRNA sequence

1 ACTGGCTGGC AAGATGAAGC TCTCCCTGGT GGCGCGATG CTGCTGCTGC TCAGCGCGC
61 GCGGGCCGAG GAGGAGGACA AGAAGGAGGA CGTGGGCACG GTGGTCGGCA TCGACCTGGG
121 GACCACCTAC TCCTGCGTCG GCGTGTCAA GAACGGCCGC GTGGAGATCA TCGCCAACGA
181 TCAGGGCAAC CGCATCACCG CGTCTATGT CGCCTTCACT CCTGAAGGGG AACGCTGTAT
241 TGGCGATGCC GCCAAGAACC AGCTCACCTC CAACCCCGAG AACACGGTCT TTGACGCCAA
301 GCGGCTCATC GGCGCACGT GGAATGACCC GTCTGTGCAG CAGGACATCA AGTTCTTGCC
361 GTTCAAGGTG GTTAAAAGA AAACAAACC ATACATTCAA GTTGATATTG GAGGTGGCA
421 AACAAAGACA TTTGCTCCTG AAGAAATTTC TGCCATGGTT CTCACTAAAA TGAAAGAAC
481 CGCTGAGGCT TATTGGGAA AGAAGGTTAC CCATGCAGTT GTTACTGTAC CAGCCTATTT
541 TAATGATGCC CAACGCCAAG CAACCAAAGA CGCTGGAAC ATTGCTGCC TAAATGTTAT
601 GAGGATCATC AACGAGCCTA CGGCAGCTGC TATTGTTAT GGCTGGATA AGAGGGAGGG
661 GGAGAAGAAC ATCCTGGTGT TTGACCTGGG TGGCGGAACC TTCGATGTGT CTCTTCAC
721 CATTGACAAT GGTGTCTTCG AAGTTGTGGC CACTAATGGA GATACTCATC TGGGTGGAGA
781 AGACTTTGAC CAGCGTGTCA TGGAACACTT CATCAAACGT TACAAAAAGA AGACGGCAA
841 AGATGTCAGG AAAGACAATA GAGCTGTCA GAAACTCCGG CGCGAGGTAG AAAAGGCCAA
901 ACAGGGCCCTG TCTTCTCAGC ATCAAGCAAG AATTGAAATT GAGTCCTTCT ATGAAGGAGA
961 AGACTTTCT GAGACCCCTGA CTCGGGCCAA ATTTGAAGAG CTCAACATGG ATCTGTTCCG
1021 GTCTACTATG AAGCCCGTCC AGAAAGTGTGTT GGAAGATTCT GATTGAAAGA AGTCTGATAT
1081 TGATGAAATT GTTCTTGTG GTGGCTCGAC TCGAATTCCA AAGATTCAAG AACTGGTTAA
1141 AGAGTTCTTC AATGGCAAGG ACCATCCCG TGGCATAAAC CCAGATGAAG CTGTAGCGTA
1201 TGGTGCTGCT GTCCAGGCTG GTGTGCTCTC TGGTGATCAA GATACAGGTG ACCTGGTACT
1261 GCTTGATGTA TGTCCCCCTTA CACTTGGTAT TGAAACTGTG GGAGGTGTCA TGACCAAAC